

FREQUENTLY ASKED QUESTIONS

Regarding Well Stimulation Regulations under Senate Bill 4 (Pavley, Chapter 313, Statutes of 2013)

THE REGULATION PROCESS

Why are regulations necessary?

By its terms, most of SB 4 is required to be implemented in regulations to be developed by the Division of Oil, Gas and Geothermal Resources (Division), part of the Department of Conservation (Department). SB 4 requires that the implementing regulations shall be approved by January 1, 2015, and will go into effect on July 1, 2015.

When will the process of preparing implementing regulations begin, and how long will it take?

The formal “rulemaking” process began with release of the proposed implementing regulations on November 15, 2013. It is anticipated to take a year to complete. However, the regulations do not go into effect until July 1, 2015.

Will the public have an opportunity to comment on these regulations?

When the proposed regulations were initially released on November 15, 2013, the public had a 60-day period to submit comments on the implementing regulations and attend one of five planned public hearings at various locations in the State. The Department released revisions to the proposed regulations on June 13, 2014, and the public had 45 days to review and comment on those revisions. On October 9, 2014, the Department released a second set of revisions to the proposed regulations, and provided for 15 days for the public to review and comment on the revisions. Written comments about the revisions to the implementing regulations can be submitted by October 24, 2014 to this email address:

DOGGRRegulations@conservation.ca.gov.

SB 4 becomes law in 2014, not 2015. Will there be any protections to cover well stimulation treatments before the 2015 implementing regulations take effect?

SB 4 includes a streamlined interim procedure to be used for a one-year period beginning in January, 2014, in which owners or operators may proceed with well stimulation treatments without a permit if they comply with specified provisions of the Act. The Division used emergency regulatory authority to set up rules for this 2014 interim process. These emergency regulations went into effect on January 2, 2014, and will remain in effect until the proposed permanent regulations go into effect. These



frequently asked questions address only the implementing regulations expected to become effective on July 1, 2015.

PUBLIC DISCLOSURES

Will operators be required to obtain a permit to conduct well stimulation treatments?

Yes. Once the implementing regulations go into effect in July 2015, they will require operators to obtain a permit and perform specific testing, evaluation, and analysis prior to commencing well stimulation treatments to ensure that the operations will not result in contamination of protected water. The permit will be good for a period of one year.

How will I know if a well near me will be getting a stimulation treatment?

There are three points at which notifications to neighbors and/or the general public will occur. First, SB 4 requires that operators notify property owners and tenants in advance of commencing stimulation operations. Next, it requires the information to be submitted to the Division, and the Division will post the information, including the location of the well, on its public website within five days of issuing a permit. The Division's website is at <http://www.conservation.ca.gov/dog/Pages/Index.aspx>. Finally, the results of the stimulation operation, including chemicals used and their concentrations, are to be posted to FracFocus, as described immediately below.

Are companies required to disclose the chemical composition of the well stimulation treatment?

SB 4 requires operators to publicly disclose detailed information about well stimulation treatments, including a complete list of chemicals used and their concentrations. SB 4 requires the Department to develop a website to provide chemical information to the public. Until this website is developed, operators are required to submit the information directly to the Division, and the Division will make the information available on its public website. In addition, operators are required to employ the FracFocus.org website (<http://fracfocus.org/>) to make the information about the chemical composition of the well stimulation fluids available to the public.

Can companies withhold information about what is in the well stimulation treatment fluid based upon a claim of trade secret?

Yes, but to a limited extent only, subject to Division review and court challenge. And even if the information is legitimately withheld as a trade secret, government agencies and health professionals can have access to the information.

In California, companies and individuals have a statutory right to protect trade secret information from public disclosure, but SB 4 put limitations on trade secret protection for well stimulation fluids. SB 4 provides a process for determining if a trade secret claim is valid and for public disclosure if it is determined the information is not a trade secret. The public has the right to challenge in court a trade secret claim. SB 4 also provides that even if the information is a protected trade secret, it must be



disclosed to specified government entities, or for a health professional who reasonably believes that the information may be necessary in the diagnosis or treatment of a patient.

What is a “confidential” well and what information must be disclosed for a confidential well that will be treated?

A very small subset of wells, less than 2%, may be exempt from disclosure because by statute they are “confidential” wells. Operators may request that certain information about a well be maintained as confidential. Confidential status allows operators an opportunity to utilize information obtained from a well without having to publicly disclose the information to a competitor. Confidential status applies to onshore wells for two years, subject to six month extensions; in no case may such status apply for longer than a total of 4 years. SB 4 includes a provision that requires disclosure of a proposed or completed stimulation treatment on a well, but not the chemical constituents used.

ENVIRONMENTAL PROTECTION

How do the proposed implementing regulations ensure that well stimulation will not contaminate water?

The proposed regulations prepared by the Department of Conservation’s Division of Oil, Gas, and Geothermal Resources (Division) require rigorous testing and evaluation before, during, and after stimulation operations to ensure that wells and geologic formations remain competent and that drinking water is not contaminated. Some of the testing and evaluation requirements of the implementing regulations have not yet been implemented by any other state.

The implementing regulations require operators to evaluate the casing, tubing, and cement lining of the well borehole to ensure that the well’s construction is more than adequate to withstand operations that are intended to increase the permeability of the hydrocarbon producing formation. In addition, operators are required to analyze the faults, natural fracture zones, and other wells in the area to ensure that they will not permit the migration of fluid to other zones. If there is any chance that the induced fractures would extend beyond the hydrocarbon zone being treated, the implementing regulations require evaluation of the intervening geological formations to ensure that there is a confining barrier between the hydrocarbon strata and any other strata, to prevent groundwater contamination. The implementing regulations also require operators to monitor and test the well during and after well stimulation treatment to verify that well failure has not occurred.

Can neighbors request that their water be tested?

Yes, the regulations enable neighbors to request baseline and follow-up testing of qualifying agricultural and drinking water wells. The implementing regulations require operators to provide information about planned well stimulation treatment to the appropriate Regional Water Quality Control Board and to notify owners and tenants of neighboring property prior to well stimulation treatment. SB 4 provides for baseline and follow-up testing of water wells as requested by property owners that have been notified



that a well in their vicinity will be receiving a stimulation treatment. The test results will be provided to the requesting party, well operator, the Division, and the State Water Resources Control Board.

Will groundwater quality, and the water used in well stimulation, be monitored?

SB 4 includes requirements that (1) the State Water Resources Control Board develop a groundwater monitoring program that operators have to comply with, and (2) that well operators develop a water management plan addressing the source, disposition and amounts of water used. The groundwater monitoring and water management requirements became effective on January 1, 2014.

How will other regulatory agencies, such as the Air Resources Board, approach well stimulation treatments?

Other agencies will have a significant role in implementation of the statute. SB 4 provides for a study to be conducted to assess aspects of well stimulation treatments such as air quality, and for the Department to meet with the State's other regulatory entities to determine appropriate approaches to protecting air and water quality and safe handling of chemicals used in well stimulation, and to commit those approaches to agreements between such agencies.

How do the implementing regulations ensure that well stimulation fluids will be handled in a safe manner?

In 2011, the Division promulgated and implemented regulations to ensure that oilfield fluids are safely managed. Effective January 29, 2011, AB 1960 implementation regulations require secondary containment features around fluid containers, regular testing and maintenance of tanks and pipelines, and maintenance of a detailed spill contingency plan. In addition to these existing requirements, the implementing regulations would prohibit the storage of well stimulation fluids in unlined sumps or pits.

How do the implementing regulations address response to a spill or release of well stimulation fluids?

Various state and federal laws already require remediation and reporting of spills or releases of hazardous substances. A matrix of reporting requirements can be found on the CalEMA website here: <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

SB 4 also requires operators to specifically include well stimulation treatment fluids in their spill contingency plans. The implementing regulations include this requirement as well as the requirement to cleanup spills in accordance with all applicable statutes and regulations.

How do the implementing regulations address concerns that well stimulation treatments can induce seismic activity?

The proposed regulations require operators to report to the Division if an earthquake of magnitude 2.7 or greater occurs in the area of a recent well stimulation treatment. Tracking of seismic activity during and after well stimulation treatment will incorporate use of the California Integrated Seismic Network



and require specified evaluations will be required if an earthquake larger than magnitude 2.7 occurs within the vicinity of a well stimulation treatment.

What happens to the well stimulation fluids after the treatment occurs?

After the well stimulation operations are complete, much of the fluid comes back out of the well along with the oil, gas, and brackish water produced in the operation. In California, 80-90 percent of the water produced from oil wells is brackish water associated with the oil and gas in the geologic formation. The well stimulation fluid flowback is commingled with the fluids produced and is treated with those produced fluids. Most produced fluids in California are re-injected into oil and gas bearing zones to increase production. The remainder are injected into deep waste fluid disposal wells or processed. Wells used for sustained injection of oil and gas waste fluids for increased production or disposal already are regulated by the Division, including permitting, inspection, mechanical integrity testing, and plugging and abandonment oversight.

ENVIRONMENTAL REVIEW

Will there will an environmental impact report (EIR) prepared about well stimulation in California?

Yes. SB 4 requires the Division to prepare an EIR to evaluate and inform decision-makers and the public of potential environmental impacts of well stimulation in the state. The Division and Department began the process of “scoping” this document in late November of 2013. The scoping process will define the extent of coverage of the EIR within the parameters established under SB 4 and CEQA. SB 4 requires the EIR to be completed and certified by July 1, 2015.

Will there be an independent study prepared about well stimulation in California?

Yes. In addition to requiring an EIR, SB 4 requires the California Natural Resources Agency to prepare an independent study of well stimulation treatments, including hydraulic fracturing and acid well stimulation treatments. The California Council on Science & Technology and Lawrence Berkeley National Laboratory have been selected to conduct the study and work is underway. The study will be organized in three major areas, which will be documented in three separate report volumes. Volume I will provide the factual basis describing what well stimulation treatments are, how they are conducted in general and practiced in California, and where they have been and are being used for oil and gas production in the state. Volume II will assess the potential impacts of well stimulation treatments with respect to water, air quality, and greenhouse gas emissions, as well as induced seismicity, ecology, traffic and noise. And Volume III will present case studies to assess environmental issues and qualitative hazards for specific geographic regions, based on findings in Volumes I and II. The completion of final peer-reviewed copies of Volume I will be on or before January 1, 2015, and Volumes II and III will be on or before July 1, 2015.



WELL STIMULATION ACTIVITIES TAKING PLACE CURRENTLY

Where is well stimulation reported to be happening?

Since SB 4 became law, the Division has established an online database with information regarding well stimulation notices, including the locations of well stimulation activities. Up to date information can be found here:

http://www.conservation.ca.gov/dog/Pages/IWST_disclaimer.aspx

Information regarding the composition and disposition of well stimulation fluids, including, but not limited to, hydraulic fracturing fluids, acid well stimulation fluids, and flowback fluids, are reported to a Chemical Disclosure Registry that is publicly available. Data can be found here:

<http://www.conservation.ca.gov/dog/Pages/WellStimulationTreatmentDisclosure.aspx>

